



**Control switch, Change over switch** Surface mounting

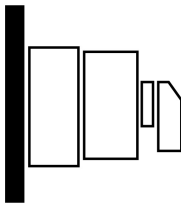
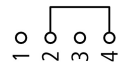



Powering Business Worldwide™

**Part no.** T0-1-15431/1

**Article no.** 207070

**Program**

Range			Control switches									
Basic function			Hand/Auto switches									
Part group reference (e.g. DIL)			T0									
Design			Surface mounting									
												
Protection type			IP65									
			<b>totally insulated</b>									
Emergency stop			without emergency switching off/emergency stop function									
			With 0 (Off) position									
Spring-return			Without spring-return									
Contact sequence			<table border="1" data-bbox="917 963 1109 1070"> <tr> <td>AUTO</td> <td>×</td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> </tr> <tr> <td>HAND</td> <td></td> <td>×</td> </tr> </table> 	AUTO	×		0			HAND		×
AUTO	×											
0												
HAND		×										
Front plate no.			 <b>FS 1401</b>									
Main conducting paths												
No. of poles		M	1									
Max. motor rating												
AC-23A												
400/415 V 50-60 Hz	P	kW	6.5									
Rated uninterrupted current	I <sub>u</sub>	A	20									

**Approbationen**

UL approval	No
CSA approval	No

**General**

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnectors to IEC/EN 60947-3 Load-break switches to IEC/EN 60947-3
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	0.5
Maximum operating frequency		Operations h	3000
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical, to IEC 60068-2-30

Ambient temperature		°C	
Open		°C	- 25 - 50
Enclosed		°C	- 25 - 40
Mounting position			As required
Mechanical shock resistance to IEC 60068-2-27	Half-sinusoidal shock 20 ms	g	> 15

## Contacts

Rated operational voltage	$U_e$	V AC	690
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated uninterrupted current	$I_u$	A	
open	$I_u$	A	20
Enclosed	$I_u$	A	20
Load rating with intermittent operation, class 12			
AB 25 % DF		$\times I_e$	2
AB 40 % DF		$\times I_e$	1.6
AB 60 % DF		$\times I_e$	1.3
Short-circuit rating			
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	$I_{cw}$	$A_{rms}$	320
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between the contacts		V AC	440
Switching angles		°	90 60 45 30
Contact units			11
Double-break contacts			max. 22
Current heat loss per contact at $I_e$		W	0.6

## Terminal capacities

Solid or stranded		mm <sup>2</sup>	1 x (1 - 2.5) 2 x (1 - 2.5)
Flexible with ferrule to DIN 46228		mm <sup>2</sup>	1 x (0.75 - 1.5) 2 x (0.75 - 1.5)
Terminal screw			M3.5
Tightening torque		Nm	1

## Switching capacity

AC		$\times U_s$	
Rated making capacity $\cos \varphi = 0.35$		A	130
Rated breaking capacity, motor load switch $\cos \varphi = 0.35$		A	
230 V		A	100
400 V		A	110
500 V		A	80
690 V		A	60
Rated operational current 440 V load-break switch AC-21A	$I_e$	A	20
Rating, AC-3 motor load switch	P	kW	
220/230 V	P	kW	3
230 V Star-delta	P	kW	4
400 V	P	kW	4
400 V Star-delta	P	kW	5.5
500 V	P	kW	5.5
500 V Star-delta	P	kW	7.5
690 V	P	kW	4

690 V Star-delta	P	kW	5.5
AC-23A Motor load switches (main switches maintenance switches)	P	kW	
230 V	P	kW	3.5
400 V	P	kW	6.5
500 V	P	kW	7.5
Rated operational current control switch AC-15			
230 V	I <sub>e</sub>	A	6
400 V	I <sub>e</sub>	A	4
500 V	I <sub>e</sub>	A	2
DC		x U <sub>s</sub>	
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I <sub>e</sub>	A	10
Voltage per contact pair in series		V	60
DC-21A	I <sub>e</sub>	A	
Rated operational current 240 V	I <sub>e</sub>	A	1
240 V Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	1
48 V			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	2
60 V			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	3
120 V			
Rated operational current	I <sub>e</sub>	A	5
Contacts		Quantity	3
240 V			
Rated operational current	I <sub>e</sub>	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I <sub>e</sub>	A	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> , < 1 fault in 100000 operations

## Notes

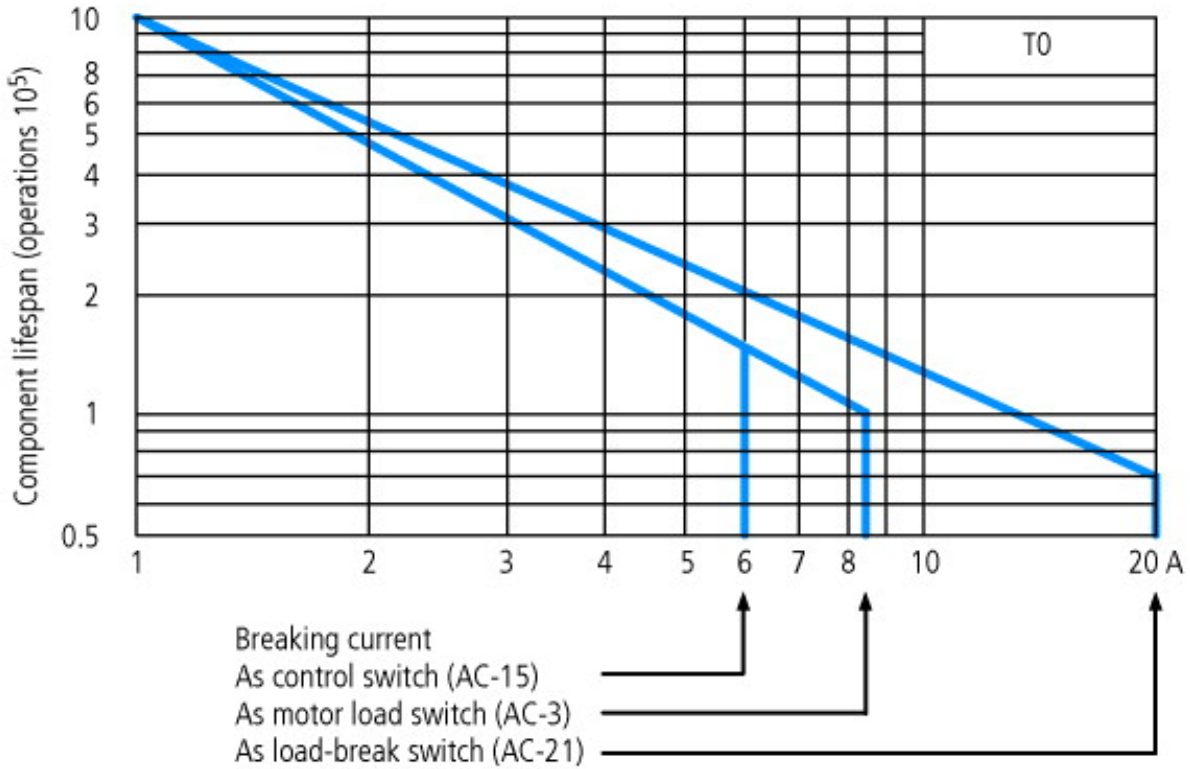
**Notes** The following applies for solid, multiwire, and flexible terminal capacities:  
If 2 conductors are being used, a max. difference of 2 cross-section categories is permissible

## Technical data according to ETIM 4.0

Suitable for front mounting			No
Complete device in housing			YES
Suitable for rear mounting			No
Device construction			Surface mounted device
Type of control element			Toggle
With 0 (off) position			YES
Max. rated operating voltage U <sub>e</sub> at AC		V	690
With retraction in 0-position			No
Rated uninterrupted current I <sub>u</sub>		A	20
Protection type (IP), at front			IP65
Front shield size			48x48 mm
Suitable for base fixing			YES
Switch function			Changeover switch

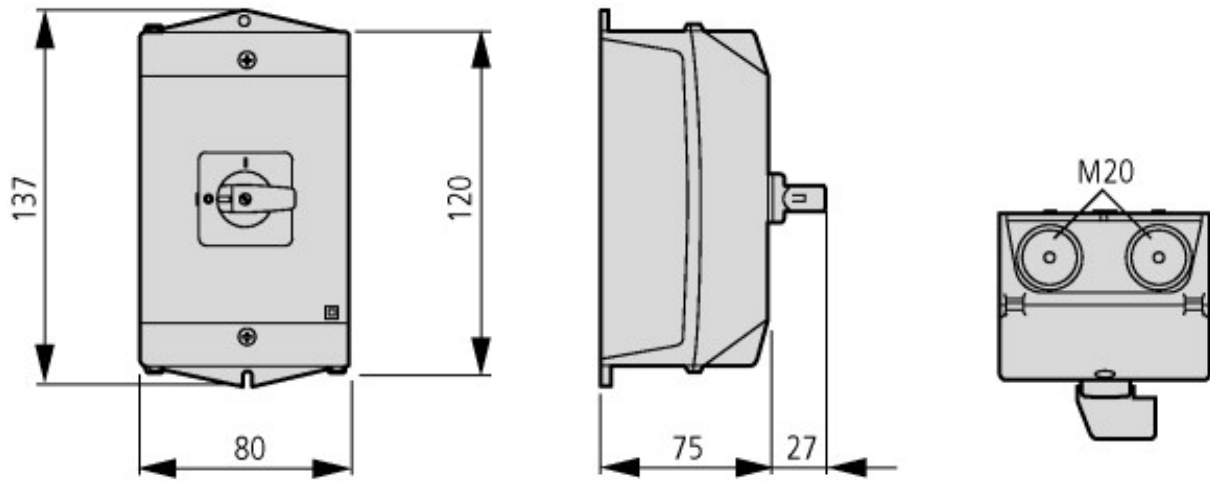
Number of poles		1
Number of switch positions		2
Suitable for distribution board installation		No

### Characteristics



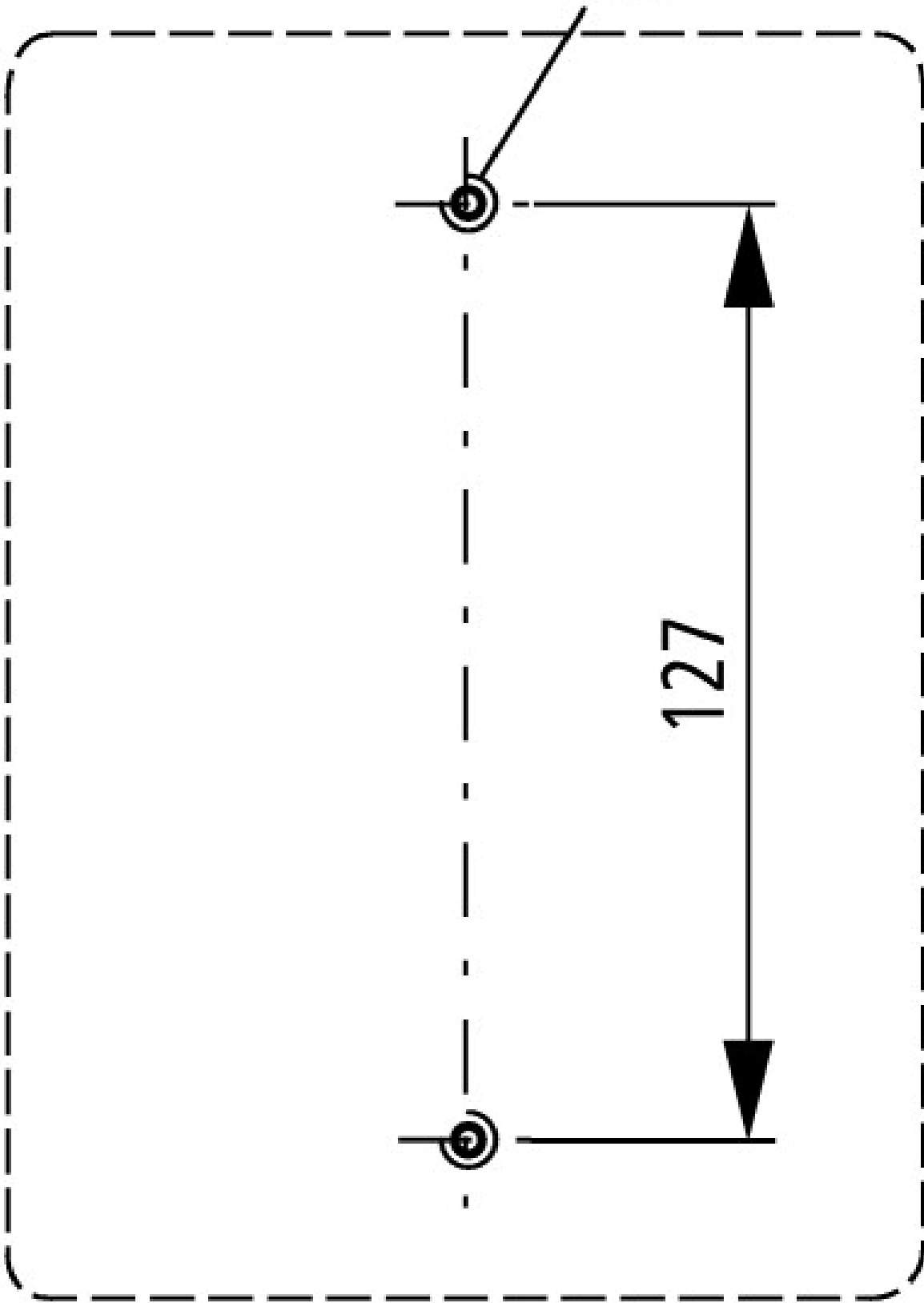
For utilisation category AC-4 (extreme load: 100 % inching, reversing or plugging)  
The blocked rotor current of the motor should not exceed the rated current of the switch for AC-21A to ensure a reasonable device lifespan.

### Dimensions

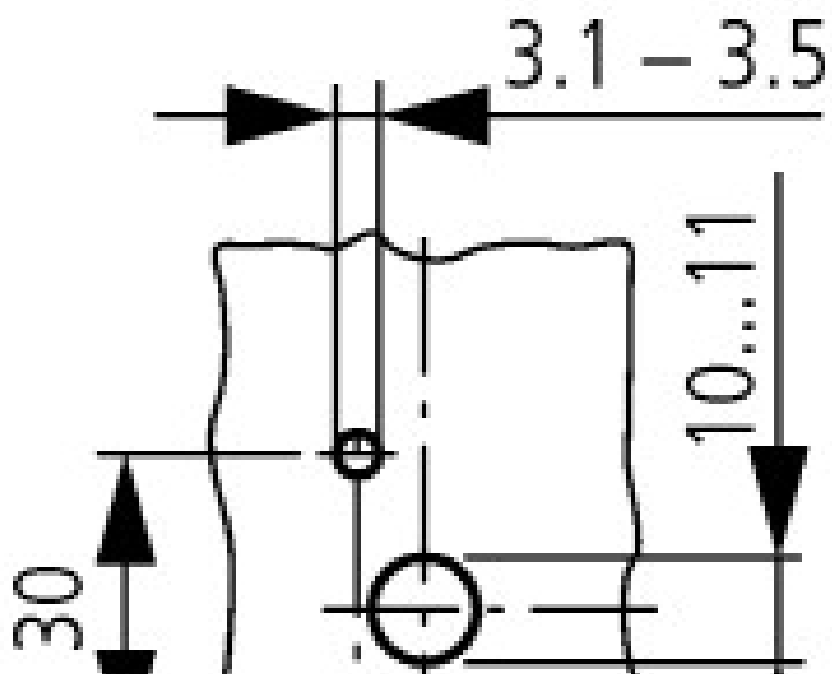
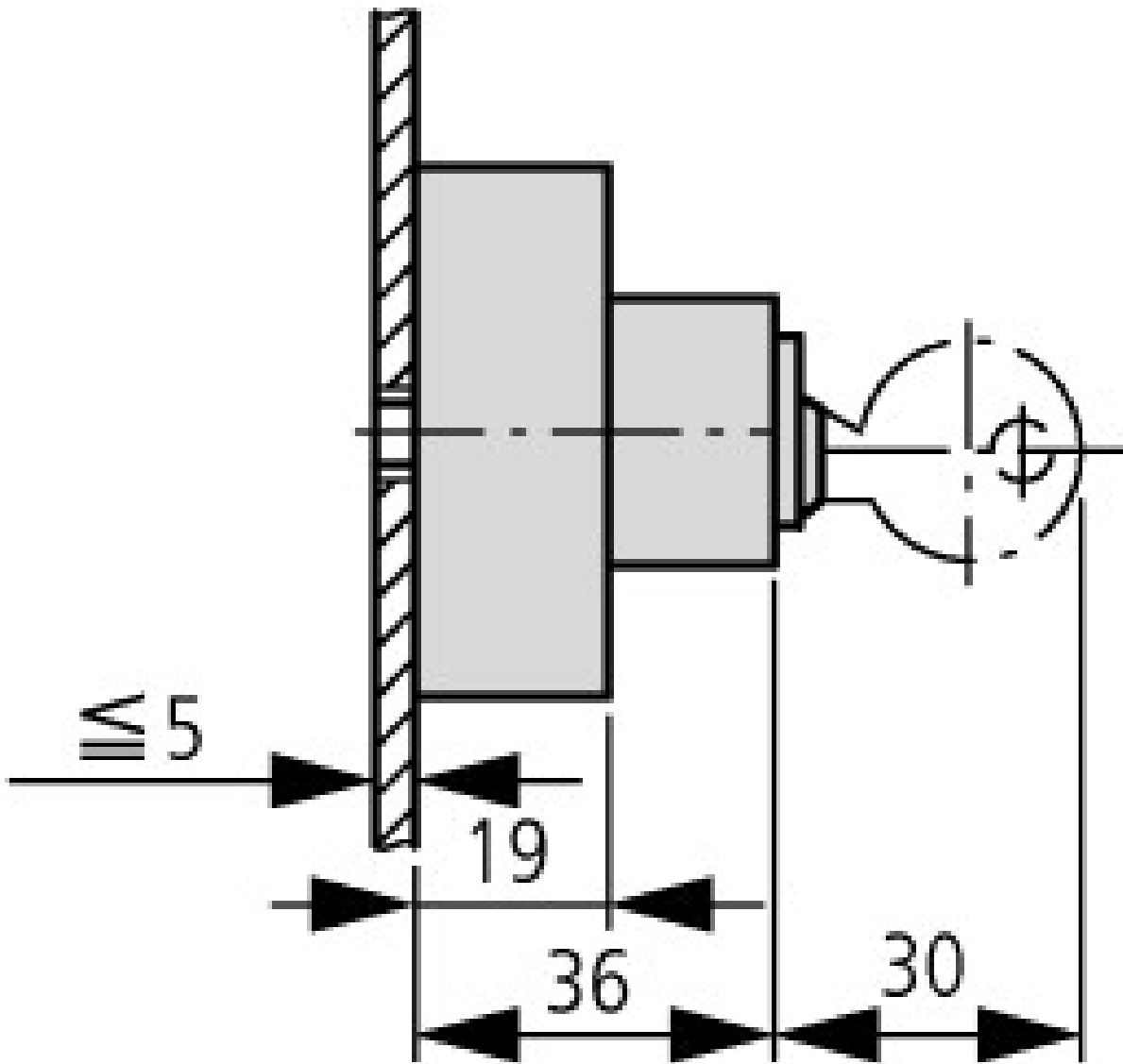


Depth of a contact unit: 9.5 mm

M4



Diameter of drilled hole Bottom



Key operation lock mechanism  
T0-1-.../11 + S-(SOND-)T0

### Additional product information (links)

AWA1150-1687 (ILO3801007Z) Cam switch	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/16870605.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/16870605.pdf</a>
<b>Engineering</b>	
Technical overview	<a href="ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Leistung_G.pdf">ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Leistung_G.pdf</a>
Key to part numbers, modular system	<a href="ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Typenschlüssel_G.pdf">ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Typenschlüssel_G.pdf</a>
Ordering of non-standard switches	<a href="ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Bestellformulare_de.pdf">ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Bestellformulare_de.pdf</a>